

## 3

member (14) is pivoted downwards to rotate the pintle (15) and the tongue (13) clockwise. Pushed by the tongue (13), the pulley (110) is rotated counter-clockwise and the pulley bracket (11) is pivoted downwards. After the tongue (13) is rotated over the pulley (110) and disengaged from it, the pulley bracket (11) then is reversedly pivoted to return to the original position to limit the tongue (13) again. Thus, the computer can be moved distinctly between the closed first position and the open second position.

Furthermore, FIG. 4 illustrates a configuration of the pintle (15) being rotated in the sleeves (16) in the open second position of FIG. 4a and the closed first position of FIG. 4b. When the computer is closed, the first chamfer (151) is engaged with the flat distal edge (17) of the sleeve (16), as shown in FIG. 4b. When the computer is opened, the first chamfer (151) is disengaged from the flat distal edge (17), as shown in FIG. 4a. Because of the interference fit between the pintle (15) and the sleeve (16) in the open second position, the sleeve (16) is expanded and generates a holding force on the pintle (15) to grasp it. Thus, the pintle (15) can be freely positioned and the display will not drop. When the computer is moved to the closed second position, the chamfer (150) is engaged with the flat distal edge (17) again. In this case, there is no gap and no holding force between the pintle (15) and the sleeve (16).

Furthermore, the flexible sleeve (16) has a helical slot (19) defined in the upper portion thereof for receiving lubrication therein, as shown in FIG. 8; or a plurality of meshes for receiving lubrication therein, as shown in FIG. 9.

Referring to FIG. 5, in a second preferred embodiment of the hinge in accordance with the present invention, the first section (150) of the pintle (15) has two chamfers (151') defined in the outer periphery thereof, and the sleeve (16) has two flat distal edges (17') to correspond to the chamfers (151'). Referring to FIG. 6, in a third preferred embodiment of the present invention, the first section (150) of the pintle (15) has three chamfers (151'') defined in the outer periphery thereof, and the sleeve (16) has three flat distal edges (17'') to correspond to the chamfers (151'').

From the above description, it is noted that the invention has the following advantages:

1. Because the tongue (13) is limited by the pulley (110) and the engagement of the chamfer (151) with the flat distal edges (17), the computer can be securely moved from the open second position to the closed first position without use of other fasteners.
2. When the computer is opened to the second position, the sleeve (16) will generate a holding force to position the display in place.

It is to be understood, however, that even though numerous characteristics and advantages of the present invention have been set forth in the foregoing description, together with details of the structure and function of the invention, the disclosure is illustrative only, and changes may be made

## 4

in detail, especially in matters of shape, size, and arrangement of parts within the principles of the invention to the full extent indicated by the broad general meaning of the terms in which the appended claims are expressed.

What is claimed is:

1. A hinge for a notebook computer comprising:

a base (10) for connecting with a body of a notebook computer, the base having a passage (100) defined therein, a bracket (11) with a pulley (110) provided thereon, pivotally mounted on the base (10), and a spring (12) provided on the base (10) with one end of the spring (12) fixed on the bracket (11), wherein an axis of the passage (100) is parallel to an axis of a rotation of the bracket (11), pivoting about the base (10), and an axis of a rotation of the pulley (110);

a hinge member (14) for connecting to a display of the computer, the hinge member having an opening defined therein;

at least one flexible sleeve (16) securely received;

a pintle (15) having a first section (150) pivotally received in the sleeve (16) in the passage (100), a second section (152) extending through the opening to engage with the hinge member (14), and a flange separating the first section (150) and the second section (152); and

a tongue (13) mounted on the second section (152) with a distal portion in contact with the pulley (110).

2. The hinge as claimed in claim 1, wherein the passage (100) further comprises a slot in communication therewith; and the flexible sleeve (16) further comprises a straight lower portion (18), an upper portion shaped as an incomplete circle, and a gap defined between a flat distal edge (17) of the upper portion and the straight lower portion, wherein the straight lower portion is received in the slot to fixedly retain the sleeve (16) in the passage (100).

3. The hinge as claimed in claim 2, wherein the first section (150) of the pintle (15) further comprises a first chamfer (151) axially formed on an exterior periphery thereof and the chamfer (151) matingly abuts an inner face of the flat distal edge (17).

4. The hinge as claimed in claim 1, wherein the first section (150) of the pintle (15) further comprises at least one lubrication groove (154) defined in an exterior periphery thereof.

5. The hinge as claimed in claim 1, wherein the sleeve (16) further comprises at least one helical slot (19) defined in an inner wall thereof.

6. The hinge as claimed in claim 1, wherein the sleeve (16) further comprises a plurality of meshes defined in an inner wall thereof.

7. The hinge as claimed in claim 3, wherein the first chamfer of the first section (150) is composed of a plurality of chamfer segments.

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